What is claimed:

1. Process for controlling the opening and the closing of intake valves of an internal combustion engine comprising at least one first and at least one second valve (S1 and S2) per said cylinder (CC), each valve permitting a first and a second intake port (C1, C2), of the cylinder, respectively, to be closed or opened, and being actuated cyclically in terms of opening and closing, characterized in that it comprises the following steps during the closing of the intake valves of a cylinder:

a first step of closing of the first valve (S1),

then a second step of closing of the second valve (S2), the time (T) between the closing of the first valve (S1) and the closing of the second valve being such that it permits the propagation toward the second valve (S2) of at least one overpressure generated in the first port (C1) by the closing of the first valve (S1).

2. Process in accordance with claim 1, characterized in that the time (T)) is at least equivalent to the time necessary for an acoustic wave to travel over the path between the first valve (S1) and the second valve (S2), using the intake ports.

3. Process in accordance with claim 1 or 2, characterized in that the value of the time (T) approximately equals:

$$T = (k * 4 * L1 + L1 + Lint + L2)/C0 \pm \lambda\, L1/C0,$$

in which formula

k is an integer;

L1 is the length of the first intake port (C1);

L2 is the length of the second intake port (C2);

Lint is the distance between the inlets of the two said intake ports located opposite

the valves;

C0 is the velocity of sound in the medium contained in the ports, and

λ is a number between 0 and 1 and preferably equal to zero.

4. Process for controlling the intake valves of an internal combustion engine in accordance with claim 3, characterized in that k has a value of 1, 2 or 3.

5. Process in accordance with one of the above claims, characterized in that the closing of the first valve (S1) is actuated in the vicinity of the mid-course of the piston after the top dead center.

6. Process in accordance with claim 5, characterized in that the openings of the valves (S1 and S2) are actuated at approximately the same moments.

7. Process in accordance with claim 5 or 6, characterized in that the openings of the valves (S1 and S2) are triggered approximately at the top dead center (TDC) of the operation of the engine.

8. System for controlling the opening and closing of the intake valves of an internal combustion engine comprising at least one first and second valves (S1 and S2) per said cylinder (CC), each valve being actuated cyclically by a actuating device (EM1, EM2) to close or open a first and second intake ports (C1, C2) of the cylinder, respectively, characterized in that it comprises a central control unit (CU) that makes it possible to control the actuating devices (EM1, EM2) in terms of the closing of the valves in such a way as to actuate the closing of the first valve (S1) and, then, a time (T) later, the closing of the second valve (S2).

9. System in accordance with claim 8, characterized in that the time (T) is such that it permits the propagation toward the second valve (S2) of at least one overpressure generated in the first port (C1) by the closing of the first valve (S1).

10. System in accordance with claim 9, characterized in that the time (T) is at

least equivalent to the time necessary for an acoustic wave to travel over the path between the first valve (S1) and the second valve (S2) using the intake ports.

11. System in accordance with claim 8 or 10, characterized in that the value of the time (T) is approximately

$$T = (k * 4 * L1 + L1 + Lint + L2)/C0 \pm \lambda\, L1/C0,$$

in which formula

k is an integer,

L1 is the length of the first intake port (C1),

L2 is the length of the second intake port (C2),

lint is the distance between the inlets of the two intake ports located opposite the valves, and

C0 is the velocity of sound in the medium contained in the ports, and

λ is a number between 0 and 1 and preferably zero.

12. System in accordance with claim 11, characterized in that k has a value of 1, 2 or 3.

13. System in accordance with one of the claims 9 through 13, characterized in that the central control unit (CU) controls the closing of the first valve (S1) in the vicinity of the mid-course of the piston after the top dead center.

14. System in accordance with claim 13, characterized in that the central control unit (CU) controls the actuating devices (EM1, EM2) in such a way as to achieve the openings of the valves (S1 and S2) at approximately the same moments.

15. System in accordance with claim 14, characterized in that the central control unit (CU) controls the actuating devices (EM1, EM2) in such a way that the openings of the valves (S1 and S2) take place approximately at the top dead center (TDC) of the operation of the engine.

16. System in accordance with one of the claims 8 through 15, characterized in that the actuating devices (EM1, EM2) are electromagnetic or electromechanical actuating devices.